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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/721,232	11/26/2003	Rolf Freimann	861840-999018	5693
51442 7590 04/20/2007 JONES DAY 222 East 41st Street New York, NY 10017-6702			EXAMINER CONNOLLY, PATRICK J	
			ART UNIT 2877	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/20/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/721,232

Applicant(s)

FREIMANN ET AL.

Examiner

Patrick J. Connolly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5, 8 and 12-24 is/are rejected.
- 7) ☒ Claim(s) 6, 7 and 9-11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Arguments***

Applicant's arguments filed January 25, 2007 have been fully considered but they are not persuasive with respect to all claims.

The Examiner concedes that claims 6, 7 and 9-11 constitute tangible results, as they describe physical transformation effected on the basis of a measurement or calculation.

Upon further consideration claims 8, 12-14 and 21-24 suffer from clarity issues under 112, 2<sup>nd</sup> paragraph. Though the claims describe a tangible result, these physical steps are not described in relationship to the measurement or calculation made. It is unclear how these steps relate to the other steps in the parent claims. As such, the calculation or measurement has not been rendered tangible. See the rejection below.

Regarding the remainder of the claims, the applicant submits that the claimed invention provides a useful, concrete and tangible result and as such the claims are directed to a practical application of a judicial exception resulting in patent eligible subject matter. The examiner respectfully disagrees that the result of the claimed invention is tangible. The applicant is reminded as set forth in MPEP 2106 that, 'the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather on whether the final result achieved by the claimed invention is "useful, tangible and concrete" '. The final result of the claimed invention is the determination of surface deviations. As such, the final result is a number. Although the number may be representative of a real world property, the result is simply a number not a practical application of the number. Until this number is claimed as used in a practical application or claimed so that the number is made available in such a manner that

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its usefulness in a disclosed practical application can be realized, it cannot be said to be tangible. In the instant claims, the result of the determination is not claimed as being used in a disclosed practical application nor as conveyed in such a manner that a disclosed practical application can be realized. As such, the claims are not directed to a practical application of the calculation, but rather solely to the mathematical operations and are therefore nonstatutory (see MPEP 2106.02).

The applicant is further directed to Annex III: Improper Tests for Subject Matter Eligibility in the Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility (OG Notice: 22 November 2005).

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**Claims 8, 12-14 and 21-24** rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter that applicant regards as the invention.

**Claims 8, 12-14 and 21-24** are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. The omitted steps are: the relationship between the “machining”, “finishing” or “coating” step to the measurement and determination steps preceding it.

### ***Claim Rejections - 35 USC § 101***

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 1-5, 8 and 12-24** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Merely determining deviations of an aspherical surface from a target shape would not appear to be sufficient to constitute a tangible result, since the outcome of the determination step has not been used in a disclosed practical application nor made available in such a manner that its usefulness in a disclosed practical application can be realized. See OG Notices: 22 November 2005, "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility".

See part b. *Practical Application the Produces a Useful, Concrete, and Tangible Result* under Section IV *Determine Whether the Claimed Invention Complies with the Subject Matter Eligibility Requirement of 35 U.S.C. Sec. 101*, sentence 3, in the OG Notice from 22 November 2005 states ‘In determining whether the claim is for a “practical application,” the focus is not on whether the steps taken to achieve a particular result are useful, tangible, and concrete, but rather that the final result achieved by the claimed invention is “useful, tangible, and concrete.”’

***Allowable Subject Matter***

**Claims 1-5 and 15-20 would be allowable if the issues with regard to non-statutory subject matter were to be resolved by means of amendment.**

**With further regard to claims 6-7 and 9-11**, the incorporation of these limitations into the independent claims would resolve the issues with respect to the tangibility of the final step and thereby direct the claims towards statutory subject matter. These claims are objected to as containing allowable subject matter.

The following is a statement of reasons for the indication of allowable subject matter:

As to independent claims 1, 19 and 20, see Applicants' Remarks, received May 17, 2006, for reasons for allowance over the prior art of record.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick J. Connolly whose telephone number is 571.272.2412. The examiner can normally be reached on 9:00 am - 7:00 pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory J. Toatley, Jr. can be reached on 571.272.2800 ext. 77. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Patrick Connolly 04.15.2007